THE STATE of ALASKA
GOVERNOR MIKE DUNLEAVY

Department of Environmental Conservation

SPILL PREVENTION & RESPONSE
Contaminated Sites Program

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File No.: 2548.38.001

October 8, 2024

Electronic Delivery Only
Lance Raymore
Federal Aviation Administration
222 W 7th Avenue Box 14
Anchorage, Alaska 99513

Subject: **Decision Document: FAA Farewell Station**
No Further Action for Building 103 Dry Well (RTH AOC 24)

Dear Mr. Raymore,

The Alaska Department of Environmental Conservation, Contaminated Sites Program (DEC) has completed a review of the environmental records associated with the Building 103 Dry Well area of concern (AOC) at FAA Farewell Station located approximately 63 miles east-southeast of McGrath and 160 miles northwest of Anchorage. Based on the information provided to date, it has been determined that the contaminant concentrations remaining at the Building 103 Dry Well AOC do not pose an unacceptable risk to human health or the environment and no further remedial action will be required unless information becomes available that indicates residual contaminants may pose an unacceptable risk.

This No Further Action determination is based on the administrative record for the Building 103 Dry Well AOC maintained by DEC. This decision letter summarizes the site history, cleanup actions and levels, and site closure conditions that apply. The FAA Farewell site will remain active on DEC's Contaminated Sites database until all AOCs have achieved cleanup complete status.

Site Name and Location:
FAA Farewell Station
~63 Miles ESE of McGrath
McGrath, Alaska 99627
62°30'21.8" N, 153°53'45.2" W

Name and Mailing Address of Contact Party:
Lance Raymore
222 7th Avenue Box 14
Anchorage, Alaska 99513

DEC Site Identifiers:
File No.: 2548.38.001
Hazard ID.: 1873

Regulatory Authority for Determination
18 Alaska Administrative Code (AAC) 75

Site Description and Background

FAA Farewell Station is located approximately 63 miles east-southeast of McGrath and 160 miles northwest of Anchorage on the southern bank of Sheep Creek and is only accessible via aircraft or by winter trails when snow is present. The station and the associated airfield were constructed in 1942 to provide defense support during World War II. The property is no longer operated or maintained by the FAA and the landing strip now serves as an emergency landing site and is frequently used by hunters and guides.

Building 103 was a three-story wooden apartment building prior to its demolition in 2004. The associated dry well was located approximately 45 feet north of Building 103 and approximately 420 feet from the southern bank of Sheep Creek. The dry well was constructed of wooden cribbing and situated at approximately 6 feet below the ground surface (bgs) with its dimensions measuring 8 feet by 8 feet by 8 feet.

Contaminants of Concern

Soil samples were collected during the investigation and cleanup activities at this AOC and analyzed for diesel range organics (DRO), gasoline range organics (GRO), volatile organic compounds (VOCs), and Resource Conservation and Recovery Act (RCRA) metals. Based on these analyses, the following contaminants were detected above the applicable cleanup levels and are considered Contaminants of Concern (COCs) at this site:

- DRO
- Barium
- Cadmium
- Lead
- Mercury
- Selenium

Cleanup Levels

Soil cleanup levels applicable to the site are the 18 AAC 75 Table B1/B2 Human Health/Maximum Allowable cleanup levels for the under 40-inch precipitation zone. DEC has made a determination that the migration to groundwater pathway is incomplete at FAA Farewell due to the depth of groundwater at the site and the fact that groundwater has never been encountered during mobilizations to FAA Farewell.

Table 1 – Approved Cleanup Levels

Contaminant	Table B1/B2 Soil Migration to Groundwater (mg/kg[1])	Table B1/B2 Soil Human Health/ Max Allowable (mg/kg)
DRO	250	12,500
Barium	2,100	20,000
Cadmium	9.1	92
Lead (total)	n/a	400
Mercury	0.36	3.1 (19)[2]
Selenium	6.9	510

Notes:

1. mg/kg = milligrams per kilogram
2. This level is based on a soil saturation concentration (Csat) using the equations set out in Procedures for Calculating Cleanup Levels, adopted by reference in 18 AAC 75.340. The Csat value is listed first, followed by the human health risk-based cleanup level in parentheses.

Characterization and Cleanup Activities

During the 2004 demolition activities, most of the wooden structure associated with the dry well was removed. The bottom 1.5 feet of cribbing was left in place because 1.5 feet of sludge was present at the base of the dry well. A sample was collected from the base and analyzed for DRO, GRO, VOCs, and RCRA metals. A liner was placed over the remaining cribbing and sludge prior to backfilling with clean fill material. Analytical results indicated exceedances of DRO (2,530 mg/kg), arsenic (26.3 mg/kg), barium (6,090 mg/kg), cadmium (38.1 mg/kg), chromium (118 mg/kg), lead (1,500 mg/kg), mercury (6.37 mg/kg) and selenium (12 mg/kg). The detected arsenic and chromium exceedances were consistent with the established background concentrations at the site; therefore, those two analytes were not considered COCs.

In 2009, the Environmental Protection Agency (EPA) issued a conditional closure of the Building 103 dry well, under the condition that the FAA continue working with DEC to address contamination at the site. The requirement for further coordination with DEC to clean up the contamination associated with the dry well was reaffirmed in a 2013 letter from the EPA to the FAA.

In 2018, approximately 13 cubic yards (cy) of DRO and RCRA metals-impacted soil were removed from the Building 103 dry well AOC. Approximately 40 cy of clean overburden from the top 5.5 feet of soil was stockpiled on a liner adjacent to the excavation and contaminated soil was placed into supersacks. The final excavation measured approximately 10 feet by 10 feet by 14 feet; six confirmation samples were analyzed for DRO and RCRA metals. Additionally, two primary and a duplicate sample were collected from the overburden stockpile and a composite sample was collected from the investigative derived waste (IDW) soil for characterization. All analytical results from the excavation and overburden stockpile were below the most stringent cleanup levels. The excavation was backfilled with clean overburden and the contaminated soil was transported offsite for disposal.

Remaining Contamination

The maximum concentrations of contaminants remaining at the site are shown in Table 2. These concentrations are all below their respective approved cleanup levels. Sample locations referred to in Table 2 are shown in the attached Figure 3.

Table 2 – Maximum Remaining Concentration in Soil at the Building 103 Dry Well

Contaminant	Sample Location	Sample ID	Date Sampled	Soil (mg/kg)
DRO	East Sidewall South Sidewall	FWL18SS-07-103DW FWL18SS-08-103DW	7/3/2018	11
Barium	Base East Sidewall	FWL18SS-05-103DW FWL18SS-07-103DW	7/3/2018	110
Cadmium	South Sidewall	FWL18SS-08-103DW	7/3/2018	0.51
Lead (total)	West Sidewall South Sidewall	FWL18SS-09-103DW FWL18SS-08-103DW	7/3/2018	13
Mercury	West Sidewall	FWL18SS-09-103DW	7/3/2018	0.047
Selenium	Base	FWL18SS-04-103DW	7/3/2018	1.4

Notes: mg/kg = milligrams per kilogram

Cumulative Risk Assessment

Pursuant to 18 AAC 75.325(g), when detectable contamination remains on-site following a cleanup, a cumulative risk determination must be made that the risk from hazardous substances does not exceed a cumulative carcinogenic risk standard of 1 in 100,000 across all exposure pathways and does not exceed a cumulative noncarcinogenic risk standard at a hazard index (HI) of 1 across all exposure pathways.

Based on a review of the environmental record, DEC has determined that residual contaminant concentrations meet the human health cumulative risk criteria for residential land use.

Exposure Pathway Evaluation
Following investigation and cleanup at the AOC, exposure to the remaining contaminants was evaluated using DEC's Exposure Tracking Model (ETM). Exposure pathways are the conduits by which contamination may reach human or ecological receptors. ETM results show all pathways to be one of the following: De Minimis Exposure or Pathway Incomplete. A summary of this pathway evaluation is included in Table 3.

Table 3 – Exposure Pathway Evaluation

Pathway	Result	Explanation
Surface Soil Contact	Pathway Incomplete	Contamination is not present in surface soil. The dry well was excavated to 14 feet bgs and backfilled with clean soil.
Subsurface Soil Contact	De Minimis	Residual contaminant concentrations are all below the most stringent 18 AAC 75 Table B1/B2 cleanup levels.
Inhalation – Outdoor Air	Pathway Incomplete	Contaminants of concern are not considered volatile enough to reach outdoor air.
Inhalation – Indoor Air (Vapor Intrusion)	Pathway Incomplete	No buildings are currently present at this remote site and DEC determined the migration to groundwater pathway to be incomplete for this source area. Residual concentrations remaining in subsurface soil are below the 18 AAC 75 Table B1/B2 Human Health cleanup levels.
Groundwater Ingestion	Pathway Incomplete	DEC has made a determination that the migration to groundwater pathway is incomplete at FAA Farewell.
Surface Water Ingestion	Pathway Incomplete	Contaminants are not expected to migrate to surface water. The nearest surface water is approximately 420 feet away.
Wild and Farmed Foods Ingestion	Pathway Incomplete	Residual contamination is in the subsurface and detected concentrations were below the applicable cleanup levels.
Exposure to Ecological Receptors	Pathway Incomplete	There are no concerns about adverse impacts to ecological receptors.

Notes:
1. "De Minimis Exposure" means that, in DEC's judgment, the receptors are unlikely to be adversely affected by the minimal volume or concentration of remaining contamination.
2. "Pathway Incomplete" means that, in DEC's judgment, the contamination has no potential to contact receptors.

DEC Decision
Soil and groundwater contamination at the Building 103 Dry Well AOC have been cleaned up to concentrations below the approved cleanup levels suitable for residential land use. DEC approval is required for movement and disposal of soil and/or groundwater subject to the Site Cleanup Rules, in accordance with 18 AAC 75.325(i). Since the cleanup at this AOC met the most stringent cleanup levels of 18 AAC 75.341, Tables B1 and B2 this letter will serve as your approval for future movement and disposal of soil associated with this release.

Movement or use of contaminated material in an ecologically sensitive area or in a manner that results in a violation of 18 AAC 70 water quality standards is prohibited. Furthermore, groundwater throughout Alaska is protected for use as a water supply for drinking, culinary and food processing, agriculture including irrigation and stock watering, aquaculture, and industrial use. Contaminated site cleanup complete determinations are based on groundwater being considered a potential drinking water source. If, in the future, groundwater from this site is to be used for other purposes, additional testing and treatment may be required to ensure the water is suitable for its intended use.

This determination is in accordance with 18 AAC 75.380 and does not preclude DEC from requiring additional assessment and/or cleanup action if information indicates that contaminants at this site may pose an unacceptable risk to human health, safety, or welfare or to the environment.

Informal Reviews and Adjudicatory Hearings
A person authorized under a provision of 18 AAC 15 may request an informal review of a contested decision by the Division Director in accordance with 18 AAC 15.185 and/or an adjudicatory hearing in accordance with 18 AAC 15.195 – 18 AAC 15.340. See DEC's "Appeal a DEC Decision" web page https://dec.alaska.gov/commish/review-guidance/ for access to the required forms and guidance on the appeal process. Please provide a courtesy copy of the adjudicatory hearing request in an electronic format to the parties required to be served under 18 AAC 15.200. Requests must be submitted no later than the deadline specified in 18 AAC 15.

If you have any questions about this no further action decision, please contact me at (907) 451-1682 or via email at sophia.bracio@alaska.gov.

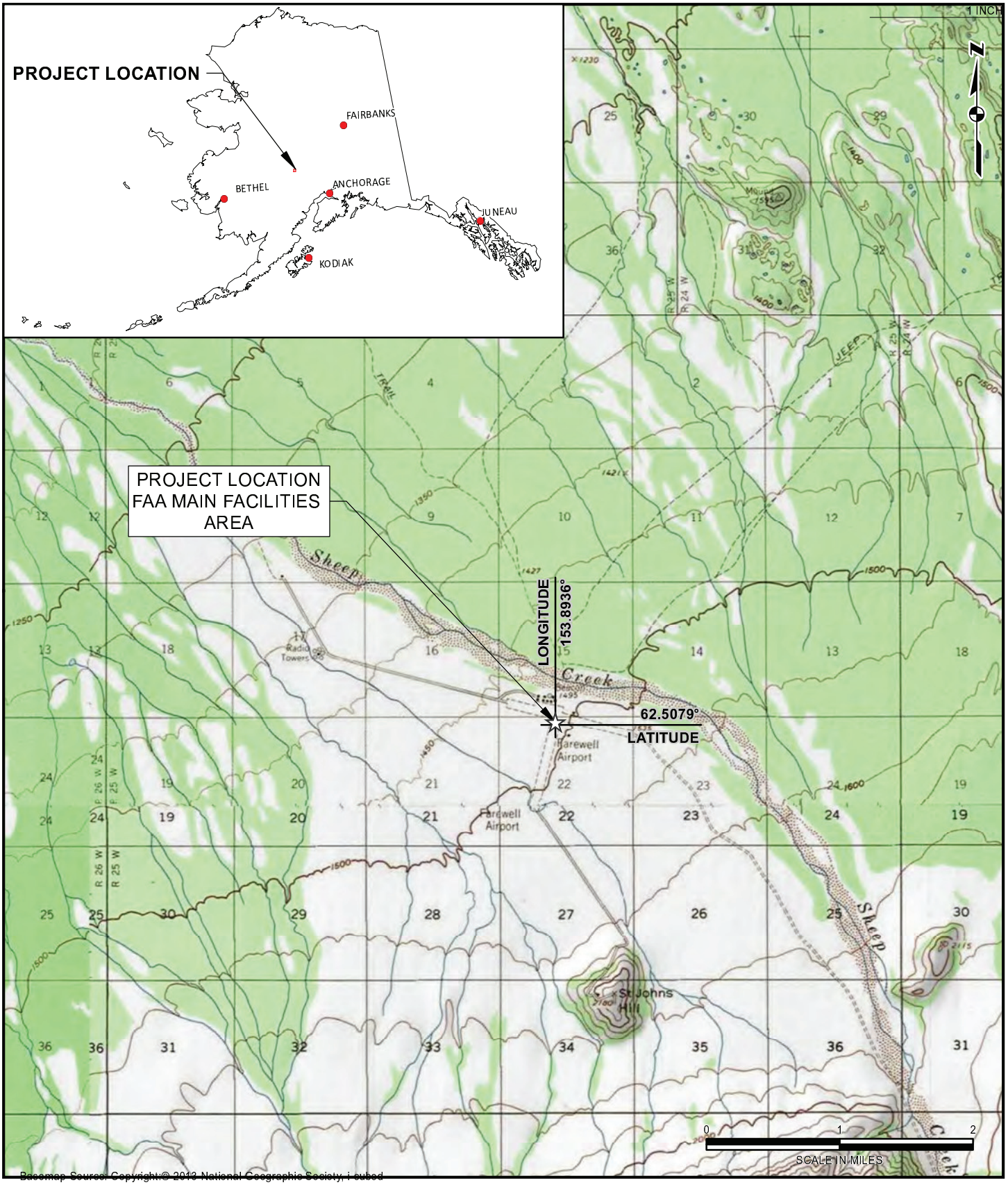
Sincerely,

Sophia K. Bracio

Sophia K. Bracio
Environmental Program Specialist

Enclosure(s): Figure: State and Site Vicinity (Brice 2020)
Figure: Site Layout (Brice 2020)
Figure: 2018 Excavation and Sample Results (Brice 2020)

cc, via email: Jamie McKellar, DEC
Tim Sharp, DEC



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Bryce Environmental
An ANC 8(a)
3800 Centerpoint Dr. Ste. 400
Anchorage, AK 99503

FAREWELL REMEDIAL INVESTIGATION AND REMEDIAL ACTION

FAREWELL, ALASKA

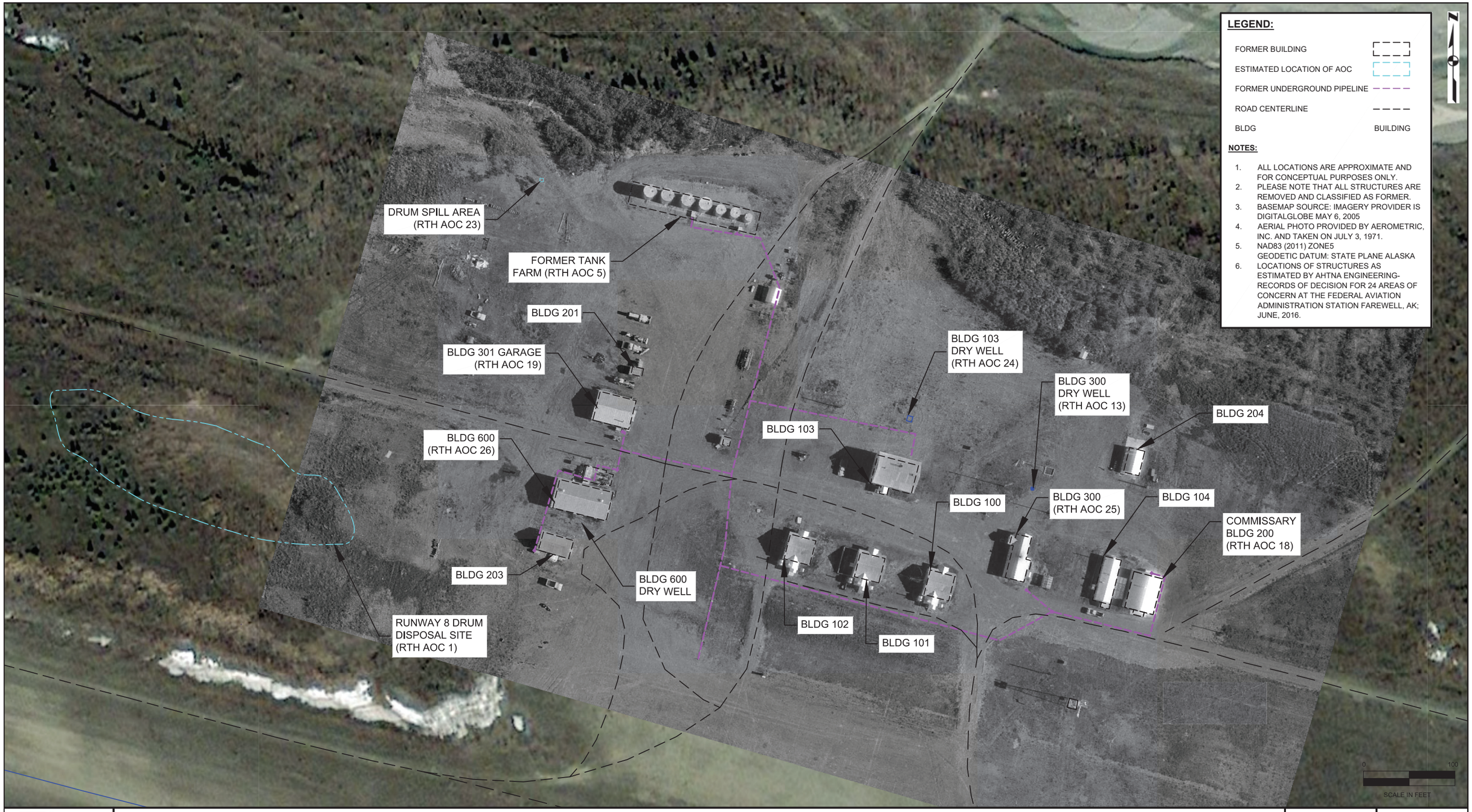
STATE AND SITE VICINITY

DATE: 1/29/2019

PROJECT No.: 061801

DRAWN: K.T.

FIGURE: 1



Brice
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Environmental Services Corporation
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Anchorage, AK 99503

FAREWELL REMEDIAL INVESTIGATION AND REMEDIAL ACTION

FAREWELL, ALASKA

SITE LAYOUT
QUARTERS AREA

DATE: JANUARY 2019

PROJECT No.: 061801

DRAWN: K.T.

FIGURE: 4

FWL18SS-06-103DW(6')		
Analyte	Depth (ft bgs)	Concentration (mg/kg)
DRO	6	6.7 J
Arsenic	6	**10**
Barium	6	77
Lead	6	10
Cadmium	6	0.38
Chromium	6	**24**
Selenium	6	1.2

FWL18SS-05-103DW(14')		
Analyte	Depth (ft bgs)	Concentration (mg/kg)
DRO	14	4.9 J
Arsenic	14	**14**
Barium	14	110
Lead	14	12
Cadmium	14	0.38
Chromium	14	**19**
Selenium	14	1.1

FWL18SS-04-103DW(14')		
Analyte	Depth (ft bgs)	Concentration (mg/kg)
DRO	14	6.9 J
Arsenic	14	**12**
Barium	14	99
Lead	14	11
Cadmium	14	0.43
Chromium	14	**23**
Selenium	14	1.4

FWL18SS-09-103DW(8')		
Analyte	Depth (ft bgs)	Concentration (mg/kg)
DRO	8	10 J
Arsenic	8	**12**
Barium	8	92
Lead	8	13
Cadmium	8	0.46
Chromium	8	**19**
Selenium	8	1.2

BUILDING 103 DRY WELL
(RTH AOC 24)

FWL18SS-01-103DW(3')		
FS#3 Stockpile Sample		
Analyte	Depth (ft bgs)	Concentration (mg/kg)
DRO	3	9.6 J
Arsenic	3	**8.8**
Barium	3	90
Lead	3	13
Cadmium	3	0.33
Chromium	3	**16**
Selenium	3	1

FWL18SS-08-103DW(6')		
Analyte	Depth (ft bgs)	Concentration (mg/kg)
DRO	6	11
Arsenic	6	**15**
Barium	6	100
Lead	6	13
Cadmium	6	0.51
Chromium	6	**23**
Selenium	6	1.3

*FWL18SS-02-103DW(3')		
FS#5 Stockpile Sample		
Analyte	Depth (ft bgs)	Concentration (mg/kg)
DRO	3	15 J
Arsenic	3	**11**
Barium	3	89
Lead	3	13
Cadmium	3	0.5
Chromium	3	**36**
Selenium	3	1.2

FWL18SS-07-103DW(7')		
Analyte	Depth (ft bgs)	Concentration (mg/kg)
DRO	7	11
Arsenic	7	**12**
Barium	7	110
Lead	7	12
Cadmium	7	0.43
Chromium	7	**31**
Selenium	7	1.2

BUILDING 103

Legend:

–	Not analyzed
[ ]	Detection Limit
DRO	Diesel Range Organics
ft bgs	feet below ground surface
J(±)	Estimated Result; Value Biased High/Low/Uncertain
mg/kg	Milligrams Per Kilogram
ND	Non-Detect
●	Soil Sample (RESULT LESS THAN THE ADEC METHOD 2 SOIL CLEANUP LEVELS, EXCLUDING ARSENIC AND CHROMIUM)
▭	2018 Excavation Area
▭	Former Building
▭	Building 103 Dry Well

Soil Cleanup Levels (mg/kg)	
DRO	250
Arsenic**	0.2
Barium	2100
Lead	400
Cadmium	9.1
Chromium**	0.089
Selenium	6.9

0 20
SCALE IN FEET

Notes:

1. **Bold red** indicates that the result exceeds the most stringent ADEC 18 AAC 75, Method Two cleanup levels, Tables B1 or B2.
2. The ADEC cleanup level listed for each analyte is the most stringent of the under 40-inch zone human health cleanup level and migration to groundwater cleanup level (ADEC, 2018).
3. ** - Arsenic and chromium are naturally occurring; concentrations are attributed to background concentrations.
4. Site features and samples located using RTK surveying techniques by Brice Environmental Services, July 2018. Dry well feature was also located by taped distances and from historic field notes.
5. All results presented in milligrams per kilogram.
6. * - For duplicate samples, the highest detected result or the minimum detection limit is reported.
7. Alaska State Plane Coordinate System of 1983, Zone 5; NAD83

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FAREWELL REMEDIAL INVESTIGATION AND REMEDIAL ACTION
FAREWELL, ALASKA

BUILDING 103 DRY WELL (RTH AOC 24) 2018 EXCAVATION AND SAMPLE RESULTS

DATE: FEBRUARY 2019
PROJECT No.: 061801
DRAWN: K.T.

FIGURE: 20